Work Order ID 67749

Wednesday, March 30, 2011 8:57:19 AM



Page 1

Item ID: Revision ID:	D3199-3			Accept				s	Setup Star	1 18811181 8	
Item Name: Start Date: Required Date: Reference:	Bracket, Fwd L 3/30/2011 : 3/31/2011	H Start Qty: 1.00 Req'd Qty: 1.00			Cust Item I Customer:	D:			Sto	P    <b>   </b>	
Approvals:	Process Plan	:	Date: <u>//-08-3</u>	Tooling:  SPC (Y/N):		ate:		r	Run Star Sto		### ### ##############################
Sequence ID/ Work Center I		Operation Description	4	Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr D3199	Revis	sion Nbr	11.531								
100   Waterjet	•	FLOW WATER JET		0.00				IB.	11-3-34	۷	
FLOW CNC Water		Memo Cut as per I Dwg Rev:_ Prog Rev:_		0.00				`	,		<b>(P</b>
		Deburr if re	equired								
110		QC2- Inspect parts off m	nachine FAI/FAIB	0.00				Œ			
QC Quality Control		Memo		0.00					11-3-30		

Dart Aerospace	<b>Ltd</b>
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Dari Aero	Jopaoc	Liu										
W/O:			WORK ORDER CHANGES									
DATE STEP		PRO	CEDURE C	HANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approvi QC Inspect			
							1					
Part No.		DAD #1	Foult Co	togory	CP: Vos	No. DO	20:	Date				
Part No:				tegory: N								
	Re	solution:	Disposi	sition: Date: Date:								
NCR:		V	VORK OF	DER NON-CONFORMANC	E (NC	₹)						
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action Section B  Action Description  Chief Eng	Sign	&   Sec	fication otion C	Approval Chief Eng	Approv QC Inspec			

₩ôrk O	rder I	D	67	749
Wednesday,	March 3	0, 2	011	8:57:
Item ID:	D31	99-	3	



Page 2

Wednesday, Ma	rch 30, 2011	8:57:19 AM										1 450
Item ID: Revision ID:	D3199-3			Accept					Setup			
Item Name:	Bracket, Fwd	LH	1 188191 1161				•			Stop		
Start Date: Required Date: Reference:	3/30/2011 : 3/31/2011	Start Qty: 1.00 Req'd Qty: 1.00			Cust Item I Customer:	D:						
Approvals:	Process Pla	ın:	Date:	Tooling:	Da	ate:		]	Run	Start		
	QC:		Date:	<b>SPC (Y/N):</b>	Da	ate:				Stop		
Sequence ID/ Work Center II 120 QC Quality Control		Operation Description QC8- Inspect parts - secon	nd check	Set Up/ Run Hours  0.00 - INSPE  Cun rela  0.00	Tool ID  whom so Rev  see Sm) onl  1103/30	Tool#	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp
130 Brake NC Brake NC		Bend as per dwg Small Fab Memo		0.00	11/03/31							
140 QC Quality Control		QC5- Inspect part comple	teness to step on W/C	0.00 - 10 speck les D 0.00 8 n102	pay.	, )						

Dart	<b>Aerospace</b>	e Ltd
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W/O:			N	ORK ORDER CHANG	ES					
DATE	STEP	PRC	CEDURE C	IANGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
Part No		PAR #:	Fault Ca	tegory:	_ NCR: Yes N	lo DQA:	_ Date: _			
	R	esolution:	Disposit	ion:	_ QA: N/C Clo	sed: Date:				
NCR:			WORK OR	DER NON-CONFORM	ANCE (NCR)	)				
	0750	Description of NC			tion B	Verification	Approval	Approval		
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector		
				l"						
		,								
		:								

# Work Order ID 67749

Powdercoat

Powder Coating



Page 3

Wednesday, March 30, 2011 8:57:19 AM D3199-3 Item ID: Accept Setup Start **Revision ID:** Stop Item Name: Bracket, Fwd LH **Start Date:** 3/30/2011 Start Qty: 1.00 **Cust Item ID:** Required Date: 3/31/2011 **Req'd Qty:** 1.00 **Customer:** Reference: Start Run Process Plan: Approvals: Date: Tooling: Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ **Tool ID** Tool # Plan Accept Reject Reject Insp. Work Center ID Description **Run Hours** Code Qty Qty Number Stamp 145 0.00 Small Fab 0.00 Memo Small Fab ROLL AS PER DWG 147 QC5- Inspect part completeness to step on W/O 0.00 0.00 Memo Quality Control 150 Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3 0.00 1 BL 11-3-31

0.00

Dart Aer	rospace Lt	d							
W/O:			W	ORK ORDER CHANGES	3				
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Appróv QC Inspec
								;	
Part No	<b>:</b>	PAR #:	Fault Cate	egory:	NCR: Yes	No <b>DQ</b>	A:	Date: _	
	Reso	lution:	Dispositio	on:	QA: N/C	Closed:		Date: _	
NCR:			WORK ORD	ER NON-CONFORMAN	ICE (NC	R)			
		Description of NC			Section B		cation	Approval	Approv
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Dat	&   Sec	tion C	Chief Eng	QC Inspec

### Work Order ID 67749

Wednesday, March 30, 2011 8:57:19 AM



Page 4

Item ID:

D3199-3

Accept

Setup Start



**Revision ID:** 

Item Name:

Bracket, Fwd LH

**Start Date:** 

3/30/2011

Start Qty: 1.00

Required Date: 3/31/2011

Req'd Qty: 1.00



**Cust Item ID:** 

**Customer:** 

Reference:

**Approvals:** 

Process Plan:

Date:

**Tooling:** 

Date:

Run

Start

Stop

Stop



Date:

SPC (Y/N):

Date:

Reject

Insp.

**Work Center ID** 160

QC

Sequence ID/

Quality Control

Operation Description

QC3- Inspect Part Finish

Memo

Set Up/ **Run Hours** 

0.00

0.00

**Tool ID** 

Tool # Plan Accept Code Qty

Reject Qty

Number

Stamp

170

Packaging

Packaging

Identify as per dwg & Stock Location:

0.00

0.00

180

QC

QC21- Final Inspection - Work Order Release

0.00

0.00

Quality Control

Memo

Memo

Dart Aeı	rospace I	_td						·		
W/O:			W	ORK ORDER CHAN	GES					
DATE	STEP	PRO	OCEDURE CH	ANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Appró
										-
Part No	•	PAR #:	Fault Ca	egory:	NCR	: Yes	No DG	A:	Date: _	
	Res	solution:	Disposit	ion:	QA:	N/C CI	osed: _		Date: _	
NCR:			WORK OR	DER NON-CONFORM	MANCE	(NCF	R)			
		Description of NC		Corrective Action S				cation	Approval	Appro
DATE	STEP	Section A	Initial Chief Eng	•		Sign & Date	1 1	tion C	Approval Chief Eng	Approv QC Inspec
	1						1			

## **Picklist Print**

Wednesday, March 30, 2011 8:57:25 AM

Work Order ID: 67749

Parent Item:

D3199-3

Parent Item Name: Bracket, Fwd LH



Start Date: 3/30/2011

116953

Required Date: 3/31/2011

Page 1

Start Qty: 1.00

Required Qty: 1.00

_			
Com	me	ents	:

IPP RevA: RevC-prelim DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S20GA		Purchased	No			100	sf	109.0000	0.3371	0.354842	2		
										130 ((	2-3/)		

304/316 .040 Sheet

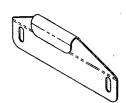
Location	Loc Oty	Loc Code
MAT020	109	
115953	1	
116437	44	
116623	64	



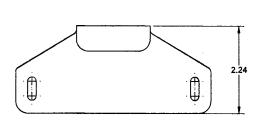
# **Dart Aerospace Ltd** WORK ORDER CHANGES W/O: Approval **Approval** PROCEDURE CHANGE By Qty DATE STEP Date Chief Eng / QC Inspector Prod Mgr Part No: \_\_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_ Date: \_\_\_\_ Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_ Date: \_\_\_\_\_ WORK ORDER NON-CONFORMANCE (NCR) NCD.

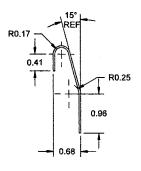
NCR:				Ell Holl Goll Gillian	<b>5</b> L (11 <b>5</b> 11)	,				
		Description of NC		Corrective Action Section B	3	Verification	Approval	Approval		
DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	Approval QC Inspecto		
						:				
								i		
NOTE: D	ate & initia	l all entries				.1	<u> </u>	1		

— 1.500 — - 1.830 R0.30 TYP BEND LINES REF R0,01 4PL R0,105 2.971 GRAIN DIRECTION TYP 2.015 REF 0.575 1.00<sub>1.090</sub> REF 0.315 0.400 4.030 4,830



#### **D3199-1F FLAT PATTERN**





# D3199-1 BRACKET MADE FROM D3199-1F

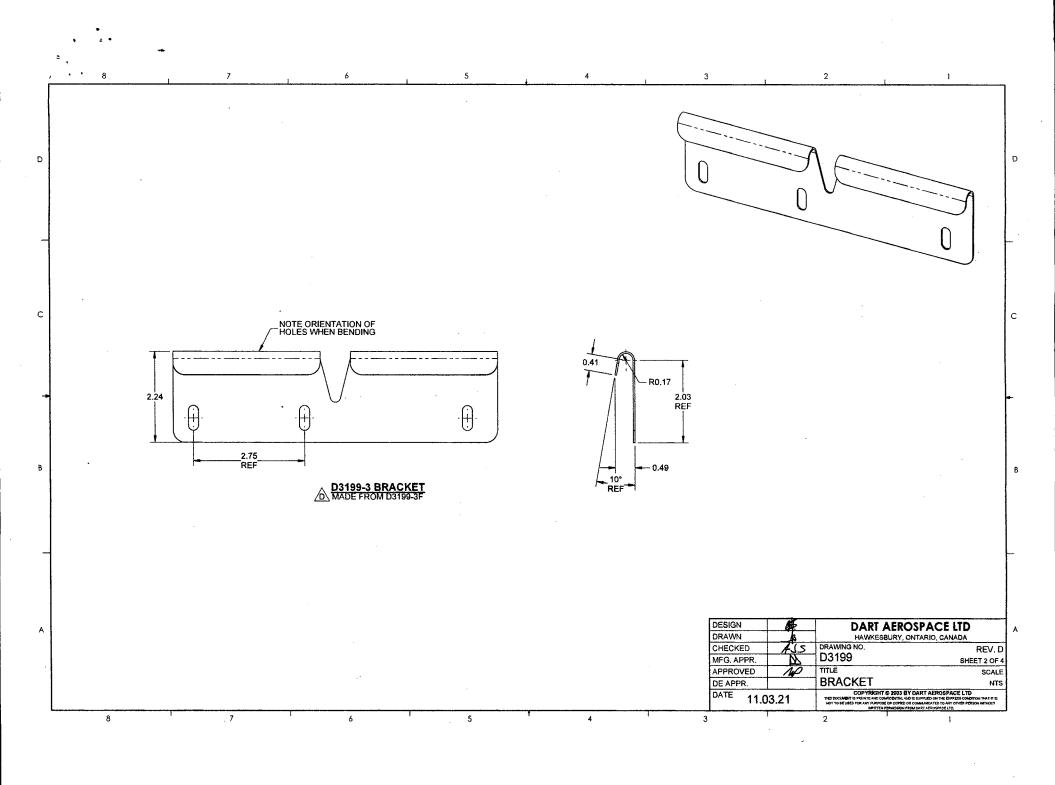
NOTES:
1) MATERIAL: AISI 304/316 SS SHEET, 0.040 THICK, ANNEALED, 2B FINISH
PER MIL-S-5059, OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240
REF DART SPEC M304S20GA
2) FINISH: POWDER COAT "GREY SANDTEX" (4.3.5.6) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFICATION: IDENTIFY WITH DART P/N "D3199-X" AND B/N "BXXXXX" PER QSI 044 6.1
7) WEIGHT: D3199-1 = 0.11 lbs, D3199-3/-4 = 0.26 lbs EACH

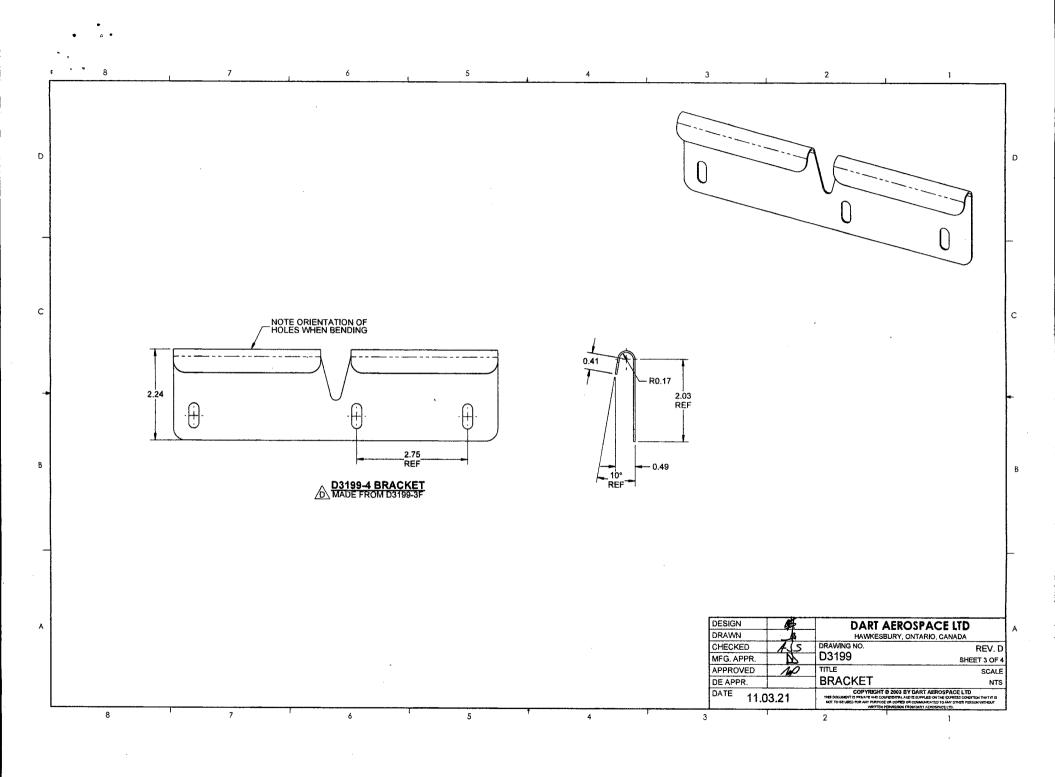
DESIGN 97 DART AL			DART AEROSPA	CEL	ľD
REV.	DESCRIPTION			BY	DATE
A	NEW ISS	UE .	CP	03.08.05	
В	2.24 WAS 2.142; ADD FINISH; UPDATE DWG				06,11,01
С	ADD -3/-4 PART (SHEET 2-4)				09.11.19
D	RE-DESIGNED D3199-3/-4/-3F PER CUSTOMER FEEDBACK TO ELIMINATE BINDING OF DOOR ONCE BRACKETS ARE INSTALLED. REF.: PAR11-79				11.03.21

DRAVIN		HAWKESBURY, ON	TARIO, CANADA
CHECKED	#35	DRAWING NO.	REV. D
MFG. APPR.	N	D3199	SHEET 1 OF 4
APPROVED	140	TITLE	SCALE
DE APPR.		BRACKET	NTS
DATE 11.0	3.21	COPYRIGHT © 2003 BY D THIS DOCUMENT IS PRINATE AND COMPENSATION AND IS NOT TO SELIBED FOR ANY PURPOSE OF COPRED OR CO	SUPPLIED ON THE EXPRESS CONDITION THAT IT IS

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DART AEROSPACE LTD	Work Order: ভ্রাবিধ
Description: BRACKET FWD LH	Part Number: D3/99-3
Inspection Dwg:D 3/99-3 , Rev: D	Page 1 of 1

# FIRST ARTICLE INSPECTION CHECKLIST

		X First Artic	cle X	Proto	otype	
Drawing Dimension	Tolerance	Actual Dimension	Accept	Rej <b>्ट</b> t	Method of Inspection	Comments
. 615 '	1- ,010	. 616	7		V 1802	
	4 .010	1500	K		V	
2,750	4 :00	7.741	7		V	
	4 -010	4.027	9		V	
	4 .010	8.037	8		V	
.990	1/2 .010	,997	7		V	
3,00	4 330	3,006	>	ļ	V .	
3.50	4 -030			ļ		
388	72 .030					
3.78	2 030					
795,	2 .010		7		V	
,040	12010	.037	<b>&gt;</b>		V	
3,64.	7- 036	3,633		ļ .	V	
4.02	7030	4015	×	-	V	
				ļ		· .
		-		ļ		
				<u> </u>		
				-		
				-		
				<u> </u>		
					Dratatina Anno	

Measu	red by:	N	Audited by:	5	Prototype A	Approval:	
	Date:	11-3-3()	Date:	1103/30		Date:	
			10 les D	Du inte		<del>.</del>	
Rev	Date	Change		1		Revised by	Approved
А		New Issue				KJ/JLM	

DART AEROSPACE LTD	Work Order: 67745
Description: Brade	Part Number: D3/99-3
Inspection Dwg: $\mathcal{D}_{219.5}$ Rev: $\mathbb{D}$	Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype								
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments		
2.24"	2.030	2.24/2.26"	_		vern ED.	ceñ 26		
2.75 (Rep)	±1030	2.75 <sup>n</sup>			vern ED	UU) 26		
D:41"	2.030	6.41"			vern & Dre	0526		
2.03 "	2.030	2.03"			Vein ED-	COIZC		
6.49 "	\$.030	0.497	J		vern ED-	0526		
10° (RLF)	±1/2°	10°	/		Boul Patral	r Edusze		
						·		
					,			

Measured by:	Audited by:	Prototype Approval:	N/A
Date: (((63/3(	Date: 4/03/31	Date:	N/A

Rev	Date	Change	to	un Appour	Rev D Das.	Revised by	Approved
Α		New Issue				KJ/JLM	